

**Birla Institute of Technology and Science, Pilani (Pilani Campus)**

**Technical Communication \_ BITS F437 (December 2022)**

**Comprehensive Examination (CLOSED BOOK)**

**MM: 40**

**Duration: 9.00 AM- 11.00 AM**

**Date:24 December 2022**

**Name:**

**ID No:**

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*Answer all questions (be specific and original).*

*Write legibly.*

- I. Correct and rewrite the errors in citing sources [using integral and non-integral citations, and punctuation] appropriately in academic writing. All citations are supposed to adhere to the APA style. (6 x 2 =12 marks) [*Underline the changes you have made*]
1. Bowler *et al.* looked at studies comparing measurements of health in an outdoor natural and synthetic environments such as indoor or outdoor built environments (2010).
  2. Microscopy has been used to probe into the cell size distribution in bread dough. (Campbell et al., 1991, Martin et al., 2004)
  3. In human performance theory, Prof. Reason states, mission, goals, policies, processes and programs (i.e., safety management system components) have latent organizational weaknesses that could give rise to flawed defenses and error precursors within organizations (1990, 1997).
  4. Use the principles of '*integral citation*' and rewrite the three propositions/statements given under '*information*' using the author's reference.

<b>Author reference</b>	<b>Information</b>
World Health Organisation in 2013	over 1 million deaths world-wide as a result of road accidents
The Global Road Safety Partnership (2007)	about 20% of fatally injured drivers in high-income countries, and between 33% and 69% in low- and middle-income countries, have a blood alcohol concentration ( BAC) in excess of the legal limit.
Ashforth and Humphrey, 1995	Engagement occurs when individuals are emotionally connected to others and cognitively vigilant.

II. *Each of the texts [reviews or discussions] is followed by a conclusion or an argument. Read the texts and identify the correct argument the writers intended to propose. (4 x 2= 8 Marks)*

1. Research has shown that there is no scientific basis for claiming that the security controls at airports make it safer to fly, and that the statistical probability of dying in a terrorist attack in the West is 0.0000063; after 11 September 2001 more people have drowned in the bathroom in the U.S. than are killed in terrorist attacks.

What is the main argument in this text?

- a. Arguably, there is a greater risk of drowning than being hit by terror.
  - b. It is clear that people drown in the bathrooms
  - c. Security at the airports should be improved
  - d. Interestingly, air travel is safer than using bathtubs.
2. Although our analysis cannot exclude that anemia and stroke risk are related, it does underscore the fact that anemia is more strongly associated with bleeding than with stroke. Oral anticoagulants produce a net clinical benefit in patients at risk for stroke, irrespective of their risk of bleeding. Accordingly, guidelines advocate OACs in all patients at risk for stroke. To prevent potentially fatal bleeding events, it is therefore, \_\_\_\_
- a. important to administer anticoagulants to prevent stroke
  - b. crucial to diagnose heart issues prior to treating anemia.
  - c. advisable not to administer anticoagulants that cause a stroke.
  - d. essential to closely monitor patients with a high bleeding risk.
3. The findings of Nahrgang et al. (2011) are in line with the social exchange theoretical framework, such that management's commitment to safety signals to employees that not only has management fulfilled the employee's implicit psychological contract, but that management cares about employees. It can be argued that when employees perceive that their organization is investing resources and providing a safe work environment for the employees' benefit, employees will then \_\_\_\_\_
- a. take the management for granted for the care provided.
  - b. commit less to the tasks assigned to them by the management.
  - c. reciprocate by investing more time into their job performance.
  - d. engage occasionally in bad mouthing.
4. when comparing industrial breadmaking to producing bread in a breadmaker, the breadmaking process differs. Industrial CBP breadmaking begins with pressurised high-speed mixing before mixing under a partial vacuum, whereas breadmakers operate at atmospheric pressure and mixing occurs at a lower speed over a longer time. In industry, proving occurs at controlled temperatures and humidity, and the duration depends on the formulation. In a breadmaker, only the temperature is controlled and proving times depend on the programme selected. Industrial bread loaves are baked in a steam oven. More heated air surrounds the loaves in industrial sized ovens compared to loaves in a compact breadmaker. It can therefore be expected that \_\_\_\_
- a. breadmaker-produced breads will differ to industrially-produced breads of the same formulation.
  - b. the temperature at which the breads are produced vary significantly between the industrial bread-makers and bread-makers.
  - c. Industrial breadmaking is a better option than baking breads in a compact breadmaker.
  - d. The taste of breadmaker-produced loaves is better than the bread baked using compact breadmaker.

III. Read the following text on the link between sleep duration and chronic diseases, and write a piece of *informed advice to students on how to manage their sleep* based on your academic knowledge. Your writing should follow the following schematic structure. Maximum length 500 words [**20 Marks**]

*Step 1:* The context of writing (general to specific) which ends with a knowledge claim or main argument.

*Step 2:* A review of current ideas and their relevance with reference to the main argument proposed in step 1 (you do not have to quote any studies; you can organize these ideas in multiple paragraphs)

*Step 3:* Concluding remarks with a focus on evaluating the proposed idea and implications for various stakeholders.

Source: <http://healthysleep.med.harvard.edu/healthy/matters/consequences/sleep-and-disease-risk>

### **Text: Researching the Link Between Sleep Duration and Chronic Disease**

There are three main types of studies that help us understand the links between sleep habits and the risk of developing certain diseases. The first type (called sleep deprivation studies) involves depriving healthy research volunteers of sleep and examining any short-term physiological changes that could trigger disease. Such studies have revealed a variety of potentially harmful effects of sleep deprivation usually associated with increased stress, such as increased blood pressure, impaired control of blood glucose, and increased inflammation.

The second type of research (called cross-sectional epidemiological studies) involves examining questionnaires that provide information about habitual sleep duration and the existence of a particular disease or group of diseases in large populations at one point in time. For example, both reduced and increased sleep duration, as reported on questionnaires, are linked with hypertension, diabetes, and obesity. However, cross-sectional studies cannot explain how too little or too much sleep leads to disease because people may have a disease that affects sleep, rather than a sleep habit that causes a disease to occur or worsen.

The third and most convincing type of evidence that long-term sleep habits are associated with the development of numerous diseases comes from tracking the sleep habits and disease patterns over long periods of time in individuals who are initially healthy (i.e., longitudinal epidemiological studies). We do not yet know whether adjusting one's sleep can reduce the risk of eventually developing a disease or lessen the severity of an ongoing disease. However, the results from longitudinal epidemiological studies are now beginning to suggest that this is likely.

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